

IN THE CLAIMS:

No claims have been amended herein. Please note that all claims currently pending and under consideration in the above-referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously presented) A solid pyrotechnic composition having a total weight, the solid pyrotechnic composition consisting of:

from about 40 weight percent to about 90 weight percent oxidizer particles, the oxidizer particles having a mean particle size of not greater than about 30 microns and comprising at least one of an alkali metal nitrate and ammonium nitrate and at least one of an alkali metal perchlorate and ammonium perchlorate;

organic crystalline particles accounting for from about 10 weight percent to about 60 weight percent of the total weight of the solid pyrotechnic composition, wherein the organic crystalline particles comprise an organic crystalline compound comprising at least one of phenolphthalein, an organic crystalline compound derived from a reaction between a phenolic compound and phthalic anhydride, fluorescein, 1,5-naphthalenediol, and terephthalic acid; and

a nonhygroscopic polymeric binder.

2. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the oxidizer particles comprise potassium nitrate.

3. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the oxidizer particles comprise potassium perchlorate.

4. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the mean particle size of the oxidizer particles is in a range of from 5 microns to 20 microns.

5. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the oxidizer particles constitute from 65 weight percent to 80 weight percent of the total weight of the solid pyrotechnic composition.

6. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein from 0.5 weight percent to 30 weight percent of the total weight of the solid pyrotechnic composition consists of the at least one of an alkali metal perchlorate and ammonium perchlorate.

7. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein from 5 weight percent to 20 weight percent of the total weight of the solid pyrotechnic composition consists of the at least one of an alkali metal perchlorate and ammonium perchlorate.

8. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein from 5 weight percent to 20 weight percent of the total weight of the solid pyrotechnic composition consists of potassium perchlorate.

9. (Canceled)

10. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the organic crystalline compound comprises phenolphthalein.

11. (Withdrawn) The solid pyrotechnic composition according to claim 68, wherein from 13 weight percent to 22 weight percent of the solid pyrotechnic composition consists of phenolphthalein and a salt of phenolphthalein.

12. (Withdrawn) The solid pyrotechnic composition according to claim 68, wherein the organic crystalline compound and the at least one salt of the organic crystalline compound have a mean particle size not greater than about 30 microns.

13. (Withdrawn) The solid pyrotechnic composition according to claim 68, wherein the organic crystalline compound and the at least one salt of the organic crystalline compound have a mean particle size not greater than 15 microns.

14. (Withdrawn) The solid pyrotechnic composition according to claim 68, wherein the solid pyrotechnic composition has a weight ratio of the organic crystalline compound to the at least one salt of the organic crystalline compound of at least 80:20.

15. (Canceled)

16. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder has a moisture uptake of not more than 4 weight percent at 75 percent relative humidity at a temperature of 21.1°C (70°F) over a period of 24 hours.

17. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder constitutes no more than about 10 weight percent of the total weight of the solid pyrotechnic composition.

18. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder constitutes from 3 weight percent to 6 weight percent of the total weight of the solid pyrotechnic composition.

19. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder comprises poly(vinyl acetate).

20. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder comprises at least one member selected from the group consisting of ethyl cellulose and nylon.
21. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the nonhygroscopic polymeric binder comprises at least one member selected from the group consisting of poly(vinyl acetate-co-vinyl alcohol), nylon, poly(ethylene-co-vinyl acetate), polyethylene glycol, nitrocellulose, and chain-extended BAMO.
22. (Previously presented) The solid pyrotechnic composition according to claim 1, wherein the solid pyrotechnic composition is free of charcoal.
23. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the solid pyrotechnic composition has a moisture uptake of not greater than 0.25 weight percent at 75 percent relative humidity at a temperature of 21.1°C (70°F) over a period of 24 hours.
24. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the solid pyrotechnic composition is formulated to have, upon ignition, a theoretical flame temperature not greater than 2300K.
25. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the solid pyrotechnic composition is formulated to have, upon ignition, a theoretical flame temperature in a range of 1750K to 2300K.
- 26.-67. (Canceled)
68. (Withdrawn) The solid pyrotechnic composition according to claim 1, wherein the organic crystalline particles further comprise at least one salt of the organic crystalline compound.

69. (Withdrawn) The solid pyrotechnic composition according to claim 68, wherein the organic crystalline compound and the at least one salt of the organic crystalline compound account for from about 10 weight percent to about 60 weight percent of the total weight of the solid pyrotechnic composition.

70.-73. (Canceled)